



1995-96 KIRIS OPEN-RESPONSE ITEM SCORING WORKSHEET

Grade 4 — Reading Question 3

Type of Passage: Practical

The academic expectation addressed by this item includes:

1.2 Students make sense of the variety of materials they read.

The core content assessed by this item includes:

- Locate and apply appropriate information.
- Interpret specialized vocabulary.

3. Teeth

Your class is giving a skit about teeth during dental health week. Pretend that you are one kind of human tooth.

- a. What kind of tooth are you?
- b. Tell about yourself, using important pieces of information from the article.
- c. Use information from the article to tell how you would like your owner to take care of you.

SCORING GUIDE

Score	Description
4	Student responds to three parts of the question: (A) identifies a tooth (B) describes important information about the tooth based on the article (C) tells how teeth should be cared for using information from the article -- brushing AND eating self-cleaner foods named specifically. Answers show an in-depth understanding of the importance of a specific tooth based on information in the article and not on prior knowledge.
3	Student responds to three parts of the question. Answer correctly identifies a tooth and gives some but not all important examples for either describing the tooth and/or telling how teeth should be cleaned by eating healthy foods and brushing.
2	Student responds to two or three parts of the question. Answer shows a basic understanding with supporting information but gives weak examples.
1	Student gives a vague response that shows a minimal understanding of the three parts of the question without supporting information.
0	Response is incorrect or irrelevant.
Blank	Blank/no response.

Read this article to find out facts about teeth and then answer question 3.

Teeth

NIPPERS, CHOMPERS, GRINDERS

Have you ever heard the expression “You are what you eat”? There is no place where it’s truer than inside your mouth.

What Vore?

The question of how an animal makes its living is an open and shut case. Have a look at its mouth, or more precisely, at the teeth inside.

An animal that eats meat will have a lot of pointy teeth for ripping and tearing. This kind of animal is called a *carnivore* (CAR • niv • or).

An animal that eats grasses and leaves will have mostly flat teeth for grinding. This kind of animal is called a *herbivore* (HERB • ih • vor).

An animal that eats both kinds of food has an assorted set of teeth. This sort of animal is called an *omnivore* (OM • ni • vor).

What kind are you?

Something Missing?

You are still losing baby teeth. Human animals get two sets of teeth. You grow one set to fit your child-size jaws. As your jaws grow, you slowly shed your baby teeth. A full set of adult teeth takes its place in your full-size adult jaws. Teeth can’t grow. They are covered with a hard non-living coat of enamel which prevents a further growth. They have no choice but to fall out to make way for their bigger replacements.

Open Wide

In the front you have big, flat, wedge-shaped teeth called *incisors* (in • SIGH • zors). They work much like scissors. The upper and lower teeth fit closely together like two blades. Open them up and close them around a bit of food. They nip out neat bites.

Around the corner are sharp pointy teeth called *canines* (KAY • nines) or dog teeth. If you ever chewed meat off a bone, you know how they got their name.

Next come the *bicuspid*s (bi • CUSS • pids). This word means having two points.

In the back are the flat *molars* (MOE • lars). This word means millstone. The bicuspid and molars are both in the grinding department.

Cavities Mean Holes

Tooth enamel is tough stuff, but not indestructible. The number one enemy of enamel is acid. Acid eats enamel. Hardly anyone eats pure acid, but lots of people get cavities. Just how does acid get into your mouth?

Mouths harbor many kinds of bacteria (microcreatures). In fact your mouth is the most contaminated spot you’ve got. Think about that for a minute.

Some of this microlife eats the same food you do -- bits of bread, caramel candy, spaghetti. That is why bacteria are hanging out inside your mouth in the first place. As they break down food they produce acid. Acid can attack the tooth enamel, leaving holes and the living tooth wide open to infection.

Counterattack

Do you ever not brush your teeth for a while? Soon your teeth begin to feel like moss is growing on them. That mossy feeling is caused by *plaque* (PLAK).

Plaque is a mixture of bits of food, saliva, and bacteria. It is bad news for a tooth to be covered by a lot of acid-making bacteria having their lunch.

At first the plaque is soft and invisible. If it is allowed to stay on a tooth, it turns into a yellow, crusty

scum called tartar. Tartar is difficult to remove. The dentist scrapes it away when you have your teeth cleaned.

The old toothbrush routine is important. It knocks the plaque off before bacteria can gang up and harm your teeth, and before plaque can harden into tartar.

Golden Tooth Rule

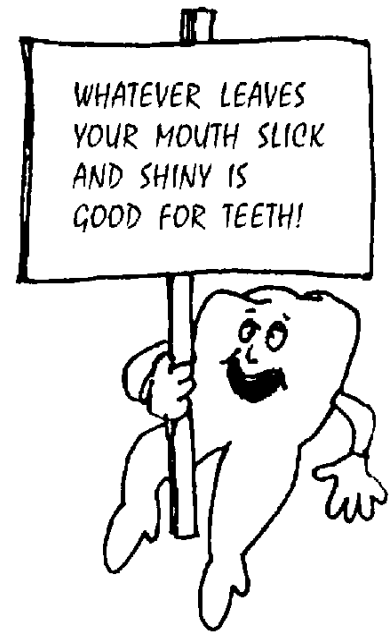
Leaving bits of food in your mouth is tooth murder. Some foods are worse than others. You know the worst: sticky, gooey sweets and acid foods with sugar. On the other hand, there are some foods that are tooth cleaners.

Here is a list of enamel killers:

Imitation fruit juice
Soda pop
Sticky candy
White bread
Dried fruit (like raisins)
Gum
Macaroni

And here are some self-cleaners:

Carrots
Apples
Pickles
Plums
Melons
Celery
Tomatoes



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KIRIS ASSESSMENT ANNOTATED RESPONSE

GRADE 4 READING

Sample 4-Point Response of Student Work

If I was a tooth in someone's mouth I would be an incisor. I am big, flat, wedge-shaped tooth, in the very front of the person's mouth. There are two incisors that fit very closely together and are used to nip nice, neat bites of food.

What my owner could do to keep me healthy is to eat healthy foods such as carrots, apples, pickles, plums, melons, celery, and tomatoes. My owner could take me to the dentist to get all that yellow nasty tarter cleared off me. Also it would be nice if my owner would brush me at least 3 times a day to get rid of the plaque. That's what I would be and want to have in a human's mouth.

Student identifies tooth.

Student includes information on location, appearance, and purpose of tooth.

Student uses information from the article to tell how to care for the tooth.

Student gives detailed examples of foods that promote dental health.

Student synthesizes multiple pieces of information.

Student describes comprehensive, important information about the tooth based on the article.

Summary annotation statement: Student effectively locates and applies appropriate information from article. Student correctly interprets and uses specialized vocabulary.

Sample 3-Point Response of Student Work

A. I would want to be a molar because they are big and strong.

B. Molars are big flat teeth. They are in the back of your mouth and they're used for grinding. That is some important information about molars.

C. I would want my owners to brush me alot. I would want him or her to not eat many things that could harm me. I would want my owner to go to the dentist regularly and not let plaque harm me. That's how I would want my owner to treat me.

Student identifies a tooth.

Methods reflect prior knowledge.

Student includes location, appearance and purpose of the tooth.

Student gives very general description of preventive care. Student provides no details regarding healthy foods or dental habits.

Summary annotation statement: Student locates and applies some appropriate information from article for parts a and b. Student correctly interprets and uses some specialized vocabulary.



KIRIS ASSESSMENT ANNOTATED RESPONSE

GRADE 4 READING

Sample 2-Point Response of Student Work

- A. I am a canine (KAY-nine) or dog tooth.
B. We are sharp pointy teeth, If you've ever chewed meat off a bone you know how they got their name.
C. I would like my owner to brush, follow the Golden Tooth Rule, and use self cleaners.

Student identifies a tooth.

Student gives a limited description of the tooth; omits mention of tooth's location.

Student mentions ideas but gives no good details about good dental care.

Summary annotation statement: Student locates and applies limited information from article. Student does not show understanding of specialized vocabulary.

Sample 1-Point Response of Student Work

The baby teeth, I would like my owner to brush my teeth every night and morning. I would like him to brush my teeth so I don't get tar tar on them.

Response addresses question in very limited way.

Student identifies a tooth that is not described in the article, so no descriptive information from the article is included.

Student uses one aspect of article information in a general way.

Student relies on prior knowledge to add support to response.

Summary annotation statement: Student does not locate or apply meaningful information from article. Student does not show understanding of specialized vocabulary.

INSTRUCTIONAL STRATEGIES

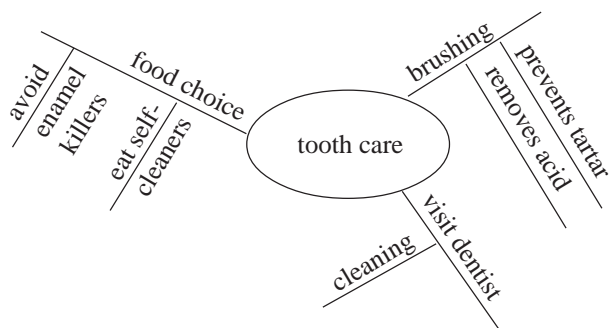
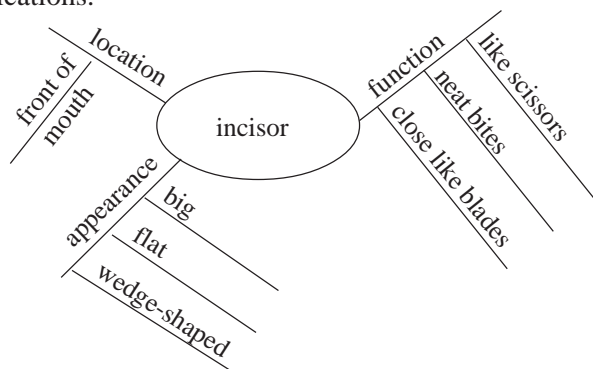
Informational reading such as this article requires the reader to use different skills than those necessary for literature. It is important that students be able to locate and apply specific information for a purpose.

Developing strategies for informational reading should help students be successful in other classes. Therefore, teachers could use passages such as this for models for students to develop independent reading strategies. One model might include the steps of:

- A. Identify the purpose for reading. This could come from the question, the situation, or the context.
- B. Relate the topic to prior experiences. Connections come through relating to other reading, audio-visual stimuli, or response to real-life background.
- C. Establish a guide for reading. This could be through organizers such as KWL, webbing, or SQRRR which provide both a context and note-taking strategy. (One good source for these organizers is *Strategic Learning in the Content Areas*, Wisconsin Department of Education, 1989.)
- D. Determine whether close reading, skimming, or scanning is the appropriate strategy to fulfill the purpose of reading. Scanning incorporates finding answers to specific questions while skimming helps determine the main ideas of the passage.
- E. Comprehend the passage by utilizing the chosen speed and type of reading.
- F. Review the information by charting facts on the organizers and/or answering the pre-reading questions.
- G. As appropriate, relate the new information to other research or application of the skills.

One of the strategies that assists readers in recognizing and organizing important information is utilizing design elements to identify main ideas. Bold face type, larger print headlines and italic print all indicate important ideas. In this article, for instance, the italicized words are all defined within the context. Students could create a personal glossary for those words with definitions and pronunciations. Headlines are useful in study strategies such as SQRRR in which the reader surveys the passage by looking at headlines, illustrations and design elements; creates questions from headlines; reads the passage; recites or recalls key ideas; and reviews information for memory.

Another strategy to manage quantities of factual information is use a graphic organizer such as webbing. After identifying critical parts of the question (tooth description and tooth care), students could web essential attributes of those classifications.



Informational articles can have a number of extensions both within the classroom and in the larger community. Often these activities could be used as performance events, writing and mathematics portfolio entries, practical living experiences, or cross-curricular studies. Possibilities for this passage could include: producing the skit referenced in the question, developing a tooth-care pamphlet, interviewing dental health professionals, creating similar articles for care of ears or eyes, drawing tooth charts, or designing ads for tooth care products (real or fictional).